

**Practice**

For use with pages 138–142

Tell whether the given number is a solution of  $-8 > -17 + x - 14$ .

1.  $-23$

2.  $23$

3.  $0$

4.  $25$

Write an inequality that represents the verbal sentence.

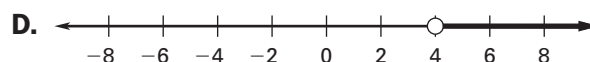
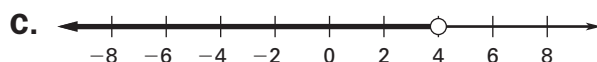
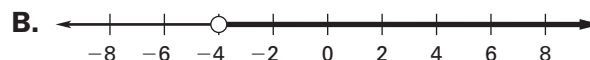
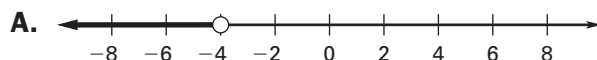
5. Nine and four tenths plus a number is less than or equal to 14.1.

6. Thirty two plus a number minus 18 is greater than  $-3$ .

7. Six tenths plus 4.7 plus a number is greater than or equal to  $-5.6$ .

8. A number minus 6.88 is less than 22.74.

Match the inequality with the graph of its solution.



9.  $x - 8 - 11 < -15$

10.  $13 > -6 + 23 + x$

11.  $10.45 + x - 5 > 1.45$

12.  $4.5 + x - 4 > 4.5$

# Practice

For use with pages 138–142

Solve the inequality. Graph your solution.

13.  $7 + x + 10 < -2$



14.  $5 + x - 9 \geq 4$



15.  $x - 12 - 14 \leq 6$



16.  $-7 - 15 + x > -15$



17.  $-23 \leq x - 18 + 25$



18.  $2.9 + x + 7.5 > 6$



19.  $-12.1 + 16.4 + x < -3.7$



20.  $-2.87 - 4.66 + x > -7.53$



21.  $-1.12 \leq x + 1.53 - 4.01$



22.  $10 + 11.88 + x \leq -4.5$



23.  $42.76 - 21.15 \geq x + 12.9$



24.  $-140.67 < 74.9 - 101.23 + x$



25. The table shows the number of preordered tickets for a three-day showing of a play. The theater has a seating capacity of 5400 people. Write and solve an inequality that represents the possible number of tickets  $t$  that can be sold at the door for each night of the play without exceeding the seating capacity of the theater.

Night	Preorder tickets
Friday	3488
Saturday	4109
Sunday	4573

26. An elevator has a weight limit of 2000 pounds. The weights in pounds of twelve people on the elevator are shown below.

175, 140, 135, 155, 170, 190, 125, 160, 150, 150, 130, 145

- Find the total weight of the twelve people on the elevator.
- A thirteenth person wants to get on the elevator. Write and solve an inequality that represents the weight  $w$  that person can be without exceeding the elevator's weight limit.